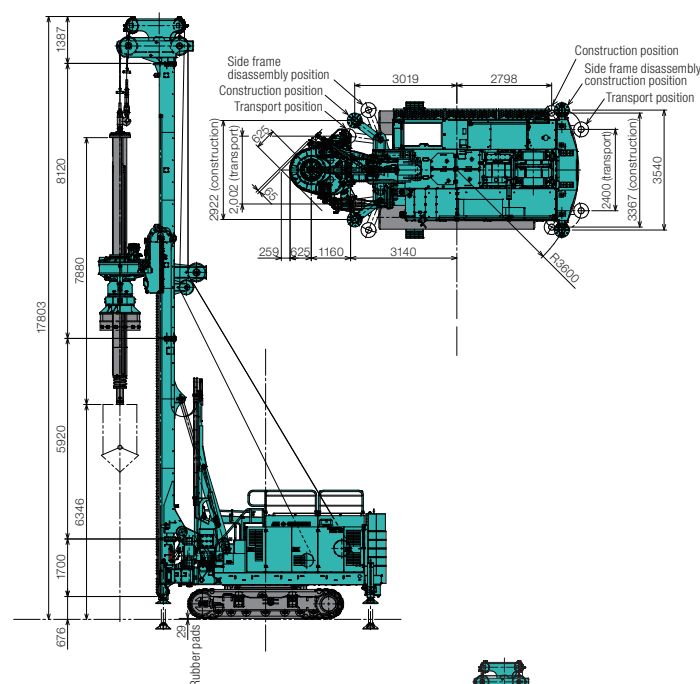


Obstruction Drilling
DHR70-8
Obstacle removal machine

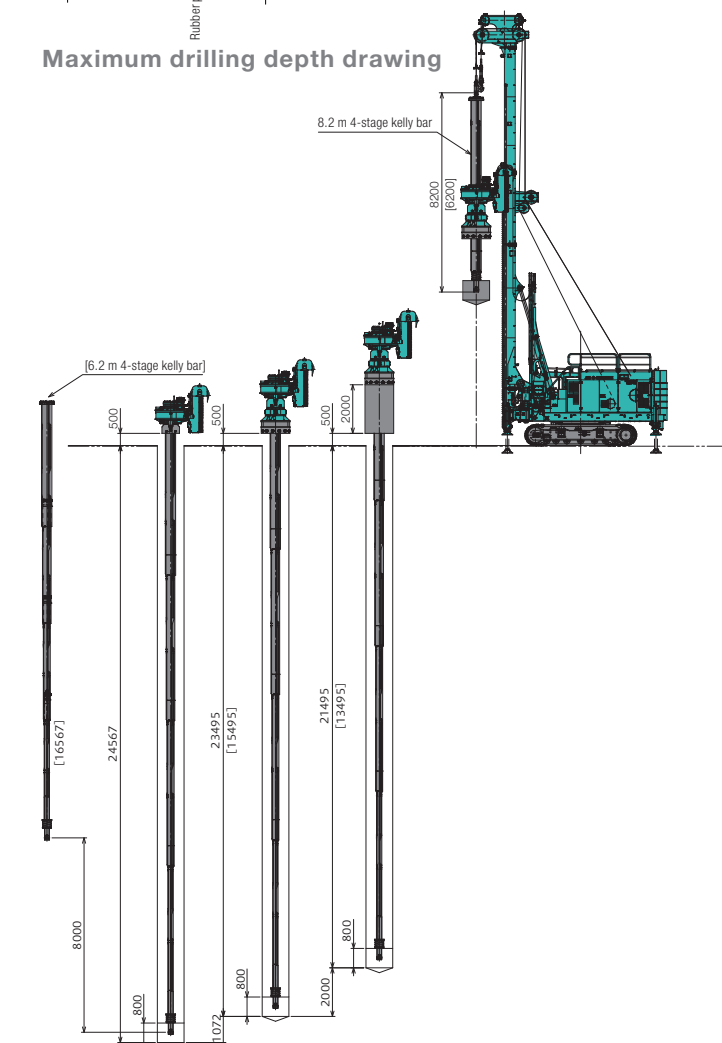
					Standard specification	
Front attachment	Leader model			M40C(R)		
	Kelly drive type			KD-400SK-40W		
	Kelly drive rotation torque	During casing drilling		kN-m	95.0 ~ 395.8	
				tf-m	9.7 ~ 40.4	
		During kelly bar drilling		kN-m	59.4 ~ 247.4	
				tf-m	6.1 ~ 25.2	
	Kelly drive rotation speed ^{*2}	1st speed		min ⁻¹	3.3 ~ 13.6	
		2nd speed		min ⁻¹	6.5 ~ 27.1	
	Kelly drive crowd/ extraction force	1st speed/2nd speed		kN	300.9	
		tf	30.7			
Ultra-high speed		kN	200.6			
		tf	20.5			
Kelly drive lifting speed ^{*2}	1st speed		m/min	5.1		
	2nd speed		m/min	8.5		
	Ultra-high speed		m/min	12.8		
Winch related	Main drum winch	Rope configuration		Torqueless rope 3×RF-WS(40) 0/0 C type ø25 mm×54 m		
		1st layer maximum hoisting force ^{*1}	1st speed	kN-m	161	
				tf-m	16.4	
			2nd speed	kN-m	56.1	
				tf-m	5.7	
		1st layer rope speed ^{*2}	1st speed	m/min	36.2	
	2nd speed		m/min	72.5		
	Aux. drum winch	Rope configuration		Torqueless rope 3×RF-WS(40) 0/0 C type ø24 mm×65 m		
		Allowable hoisting force		kN-m	78	
				tf-m	8	
1st layer rope speed ^{*2}		1st speed	m/min	34.7		
	2nd speed	m/min	69.6			
3rd winch	Rope configuration		Torqueless rope 3×RF-WS(40) 0/0 C type ø20 mm×65 m			
	Allowable hoisting force		kN-m	49		
			tf-m	5		
Main unit related	Swing speed		m/min	53.5		
	Travel speed ^{*2}	Normal		min ⁻¹	3.0	
		Fine speed		km/h	1.7	
			km/h	0.1		
	Engine		CAT C7.1 TTA (Compliant with the Act on Regulations for Emissions from Non-road Vehicles 2014 (Tier 4) exhaust emission regulations) (EU Stage V)			
	Engine rated output		kW	225		
			min ⁻¹	2,000		
			PS	306		
			r.p.m	2,000		
	Fuel tank capacity		L	350		
Full equipment weight ^{*3}		t	74.6			
Weight during transport ^{*4}		t	28.1			
Average ground pressure (at full equipment weight)		kPa	140.2			
		kaf/cm ²	1.43			

*1. Values are 1st layer theoretical values *2. Values vary depending on the load
*3. Includes casing attachment 0.6 t, hydraulic grab 2.5 t, soil discharge weight 2.5 t
*4. Leader 2.96 m, Leader upper 5.16 m: 1.0 t, Top sheave: 1.1 t, Flex coupling: 0.9 t
Weight excluding kelly drive: 6.7 t, locking kelly bar: 4.3 t, counterweight: 16.3 t, side frames (L/R): 9.4 t

Standard equipment	Main unit related	Safety devices
	Counterweight (16.3 t)	OK display
	Front jack (with bellows)	Swing warning lamp & buzzer
	Rear jack (with bellows)	Free fall alarm buzzer
	Rubber pads	Gate lock lever
	Undercover (left and right)	Engine emergency stop switch
	Folding step on operator's side	
	Side frame access step	Front attachment
	Non-slip sheet (upper house surface)	15.7 m standard leader
	Headlights (LED×left-right 2 locations)	Top sheave
	Rear-view mirrors (1 each, left and right)	Main drum winch (ø25×54 m, with swivel)
	Wipers (front upper-lower 1 each, roof)	Aux. drum winch (ø24×65 m, with 8 t hook)
	Window washer (front)	3rd winch (ø20×65 m, with 5 t hook)
	Air conditioner	Kelly drive
	Interior light (LED)	Flex coupling
	AM/FM radio with clock	Piling work management machine (Seko Master III)
	USB port	Locking kelly bar lock position display
Spirit level		
Floor mat	Transport disassembly	
Included tools	Front jack extension adapter (for trailer loading/unloading)	
	Rear jack extension adapter (for trailer loading/unloading)	
	Side frame lifting wire, shackle	
	Sub-axle for crawler attachment/detachment	
	Leader stand, leader lifting wire	
	Kelly drive lifting wire	
Optional equipment	Main unit related	Front attachment
	Folding step on engine side	Kelly guide head
	Operator's seat front guard	Locking kelly bar
	Upper house handrail (retractable)	Rotary coupling reassembly
	Microphone & speaker	*Required when installing rotary coupling for DHJ45(NR)
	Safety devices	
	Rear-view camera (2 monitor, up to 4 cameras)	
	Leader fall protection device pole	



Maximum drilling depth drawing



NIPPON SHARYO



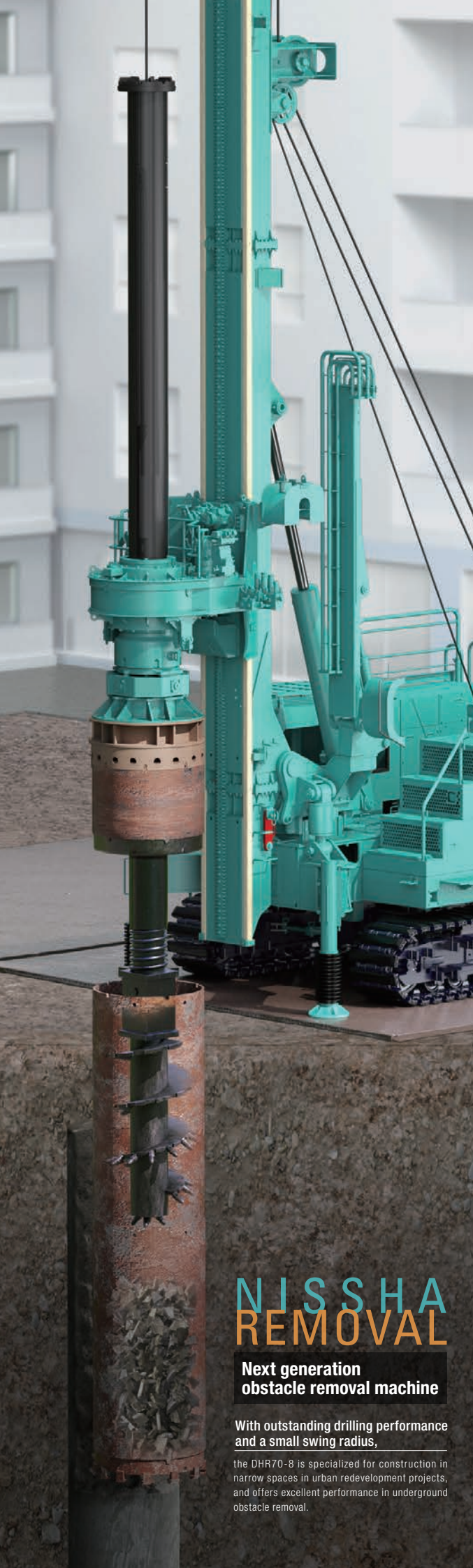
 **NIPPON SHARYO, LTD.**
<https://www.n-sharyo.co.jp/>

Construction Equipment Division/ Overseas sales department
Tel: +81-52-623-3529

- Specifications in this catalog are subject to change without notice.
- Please be sure to observe the precautions in the operation manual when operating this machine.
- Modifications to this machine or addition of other equipment/materials by the customer are outside our warranty scope. Please contact Nippon Sharvo.

Distributor

CAT.No.196B (Contents of this catalog are current as of June 2025)



NISSHA REMOVAL

Next generation
obstacle removal machine

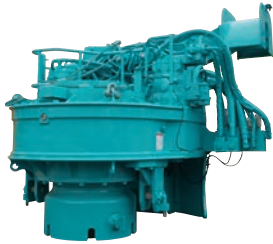
With outstanding drilling performance
and a small swing radius,
the DHR70-8 is specialized for construction in
narrow spaces in urban redevelopment projects,
and offers excellent performance in underground
obstacle removal.

Concept and characteristics

Machine Features

Pursuit of drilling torque Maximum torque 40 tf·m [KD-400SK-40W]

Newly developed high-strength leader realizes increased
auger torque.
Rotation torque (rotation speed) uses SL (stepless) control,
allowing adjustment according to work and soil conditions.



			DHR70-8	DHJ45-5NR
Maximum rotation torque	During casing drilling	kN·m(tf·m)	392(40)	323(33)
	During kelly bar drilling	kN·m(tf·m)	245(25)	245(25)
Maximum rotation speed		min ⁻¹	27	29

All winches equipped with free fall mechanism

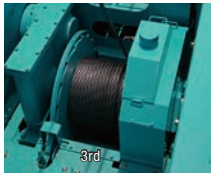
Main drum, aux. drum, and 3rd winches are all equipped with brake pedal operated free fall
mechanism. Active in multiple applications including hammer grab drilling.

			Main drum	Aux. drum	3rd
Rope diameter × length	mm×m		ø25×54	ø24×65	ø20×65
Maximum hoisting force*	1st speed	kN·m(tf·m)	161(16.4)	78.0(8.0)	49.0(5.0)
	2nd speed	kN·m(tf·m)	56.1(5.7)		
Rope speed	1st speed	m/min ⁻¹	36.2	34.7	53.5
	2nd speed	m/min ⁻¹	72.5	69.6	

*First layer theoretical value



Main drum



Aux. drum



3rd



Accelerator

With kelly bar attached, hammer grab work is possible using aux.
drum & 3rd.Brake pedal operation enables intuitive lowering work.



Front & rear jacks standard equipment

Using 4-point jacks allows maximum utilization of
auger drilling performance. Jack-up turning is also
possible, effective for narrow space entry/exit and
transport disassembly.
Movable rear jacks keep transport width within
2,990 mm.



Panel structure improves maintainability

Adopts panel structure house with wider openings to
improve accessibility to each device.

Large capacity fuel tank standard equipment

	DHR70-8	DHJ45-5NR
Tank capacity (L)	350	250+50(OP)



Engine compliant with the Act on Regulations for Emissions from Non-road Vehicles 2014



AdBlue®

Clears low-noise construction machinery standard values

Operator's cab

In operator's seat



Balance of comfort and functionality

The large sliding door and convenient centralized
layout of operating equipment create a spacious
interior. Placing the Piling work management
machine in upper left provides wider forward
visibility. A new hydraulic joystick is adopted, making
operation more comfortable.



DHR70-8 exclusive equipment

Joystick lever

Hydraulic lever provides
intuitive operation.

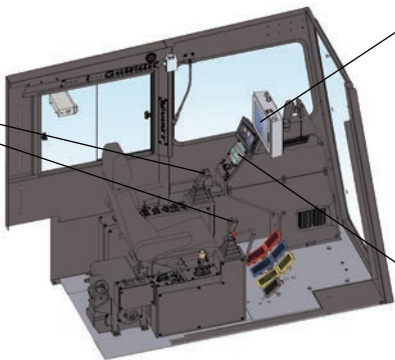
Lever holding function

Holds auger rotation operation.
Reduces operator operation load.

NEW

B-CON for obstacle removal machine

Equipped with mechanism for automatic control of
auger rotation and crowd force. Less load on the
casing bit contributes to reduced operator burden.



Piling work management machine with large display

Piling work management machine customized exclusively for obstacle
removal machines visualizes construction status and machine status.



←Color display visualizes kelly bar lockposition.
Kelly bar lights up in sequence from top as it extends
Red→Lock impossible
Green→Lock possible
Yellow→Conditional lock possible

Cluster lamps

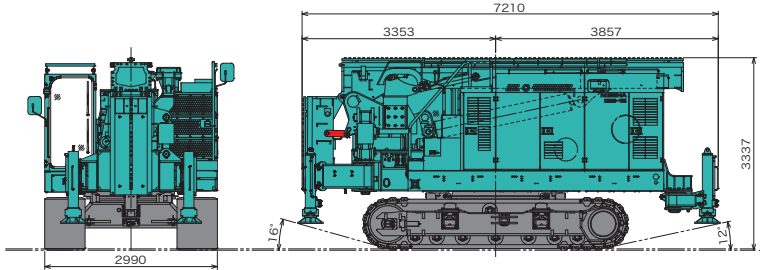
Displays the status of each drum/auger.
Indicates 1st speed/2nd speed/automatic
brake/free fall with lighting status.



Transport dimensions and weights

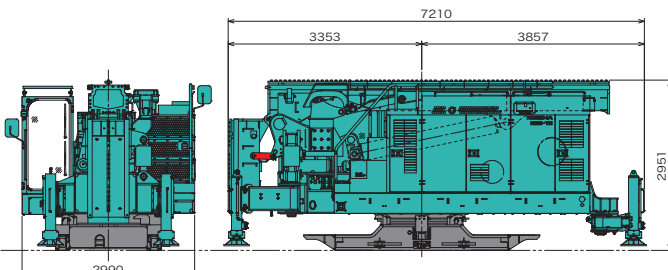
Transport condition diagram

With side frames attached

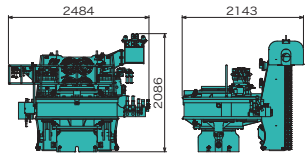


Weight during transport: 37.4 t

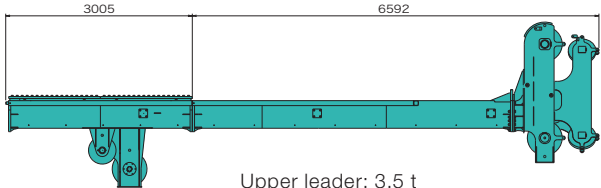
With side frames removed



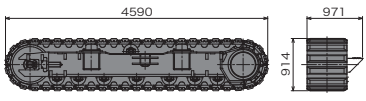
Weight during transport: 28.1 t



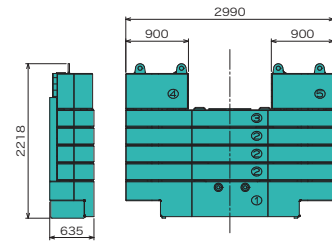
Kelly drive: 7 t



Upper leader: 3.5 t



Side frame: 4.5 tx2 units



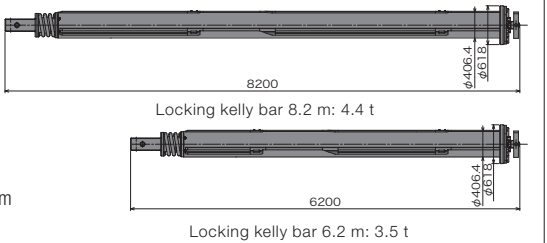
Counterweight
2.8 t+2.7 tx4 units+1.2 tx2 units=16 t

Nippon Sharyo manufactured locking kelly bar

OPTIONAL

ø406.4×8.2 m×4 stages
ø406.4×6.2 m×4 stages

2 types of kelly bars set as options
Note: Compatible with lock position detection mechanism



Locking kelly bar 8.2 m: 4.4 t

Locking kelly bar 6.2 m: 3.5 t